ACORN·USER

BRITAIN'S BIGGEST MAGAZINE FOR THE BBC MICRO · ELECTRON · ATOM

OCTOBER 1984 £1

TRAILBLAZERS:
The origins of life on a BBC micro

CARTOON ANIMATION:
Move your characters around the screen

UNCOVERED!
ACORN'S BUSINESS COMPUTER

FREE GIFT WITH THIS ISSUE

CONTENTS

Communications

Bulletin boards 167
The social side of communicating by computer is represented by bulletin boards, or free public access systems. Jeff Ashurst briefs you on how they operate, the equipment you'll need to become a registered user, and which BB to join

Reviews

Toolkit trials 157
Bruce Smith compares a fistful of Basic utility ROMs

Elite squad 165
Elite is Acornsoft's secret new space game. Tony Quinn is our test pilot . . .

Games 173
Blagger and *Bugblaster* from Alligata; *Horse Race, Pool, Corporate Climber* and *Lemming Syndrome* from Dynabyte; Screenplay's *Chickaroo;* First Byte's *Star Trader;* DACC's *Super 7* compendium; *Trench* by Virgin; *One to Nine* by Acornsoft; and *A Maze in Space* by Opus

Hardware 185
Sideways ROM sockets by Viglen and NMC give convenient and cheap expansion on the Beeb. Chris Drage compares them

Utilities 190
Bearsoft's Editor ROM; Watford's Buffer and Backup ROM; and Ampersand's Colour Module

Regulars

The News 7
Acorn's ABC – the specs, the facts; the Electron Plus 3, with 3in disc drive; instant program-entry with the MEP's bar-code reader; software on cable TV

Beeb Forum 113
Bruce Smith presents . . . NFS update; security for data files; testing the RS423; and finding the file-length

Top 20 software 155
Curse you, Caveman!

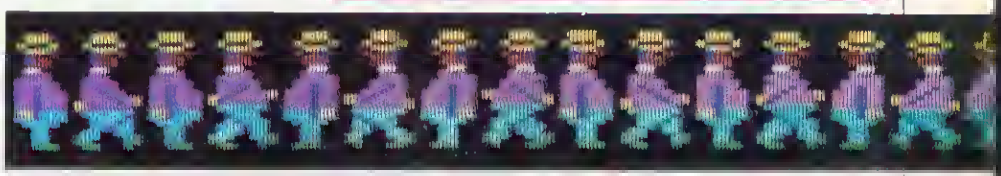
Free ads 201

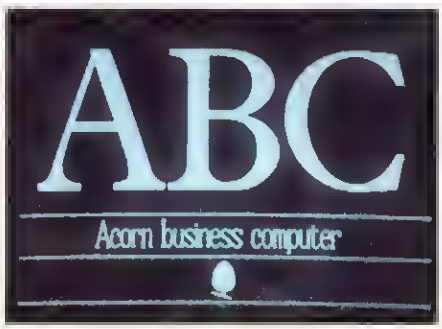
Small ads 207

Acorn Abuser's Diary 184
Curried eggs and cabbages

IN THIS ISSUE. . .

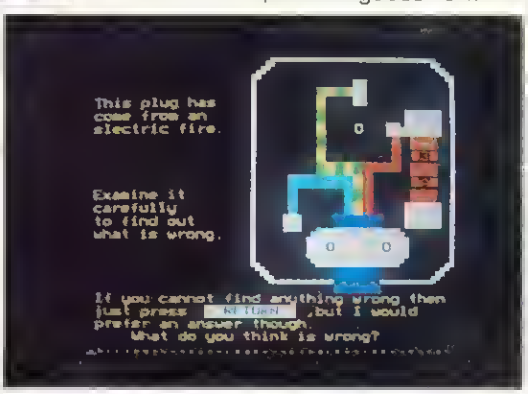
Origins of Life 27
Chandra Wickramasinghe explains how he and Sir Fred Hoyle are using the humble BBC micro to help them research the origins of life on Earth and back up their theories on microbes coming from space





Cartoon time 65
How to move the sprites designed last month. Look out for the free demonstration to download on **Micronet** and **Viewfax**

EXCLUSIVE 7
Acorn's new computers
ABC is the name for the company's new range of business machines. Read the facts, not the guesswork



Acornsoft's Microtext 137
The National Physical Laboratory developed this language to help people who were new to programming write training and educational software. Ian Birnbaum reveals how well it succeeds

NEXT MONTH. . .

Bar codes come of age
We preview the MEP bar-code reader and present listings that can be input using this device

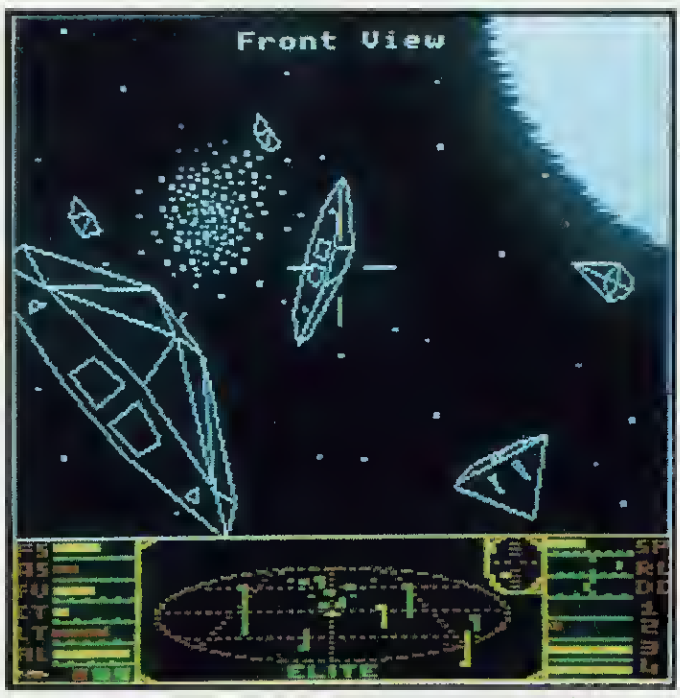
Buggies and Turtles
Six of these robots for schools and hobbyists are given a thorough going-over

Sideways ROMs
Joe Telford studies the popular chips and what will work with second processors

STAR STATUS

Tony Quinn goes boldly to Cambridge on an Elite mission

'Elite', Acornsoft, BBC B, £14.95 (disc £17.95), Electron, £14.95



SPACE is the final frontier as far as Acornsoft is concerned, and the company reckons to have cracked it with the new release, *Elite*.

This game has been the subject of the biggest security operation the company has ever mounted, to ensure no details leaked out before the launch this month. It is still so secret that even I don't have a copy!

Acornsoft spirited half a dozen journalists up to Cambridge and locked them in a room to review the game. So, this is not a full review, but my impressions after bashing away for a couple of hours. However, having written my escape clause, I must say *Elite* looks superb.

Imagine a subtle blending of *Aviator* and *Starship Command*, a sprinkling of the *Star Wars* films, shaken with a trading adventure, served up with some secret ingredients and you have *Elite*.

It sounds ambitious but it's all there, wrapped in a short science fiction novel that sets the scene, a substantial training manual, a poster identifying the foes and friends you are likely to encounter and a postcard giving entry to the competitions that Acornsoft plans to base around the game. Not bad for £15. Plus, the disc is filled out with some special bits and pieces. You'll have to play to find out what they are – I've no idea!

The idea of the game is to start off with a simple space ship and build it and your reputation up to 'Elite' status.

Budding Han Solo's start the game with a sparsely equipped space ship and a small supply of money. The ship is docked in a station orbiting a planet. Pressing various function keys gives information on the planet and enables the raw pilot to buy various goods from food and drink to drugs. Having stocked up, the ship is launched into space and the course set for another planet.

Once a destination has been fixed, the ship goes into hyperspace and after a few seconds emerges near the chosen planet. Then it's a dash to reach the orbiting space station before the pirates pounce. The ship has then to be docked by plotting a flightpath along a line leading from the centre of the planet into the station. The entrance is a slit, and the station is rotating, so the ship has to match rotation, otherwise it just won't fit.

Your wares can then be traded, preferably for a profit. Any credits earned can be used to fund the next flight and buy better equipment for the ship.

As you trade and equip the ship until it's bristling with weaponry and everything money can buy, it becomes tempting to play naughty. Illicit cargoes such as slaves and drugs can be bought. You could be in trouble with the law but it's a good way of making a fast buck. Then you can attack space stations for the fun of it, and even try trading with one of the deadlier planets. The risks are high, but so are the profits.

That's the theory, now for the action. The colour screen shot shows a typical view of space, except there are a lot of nasties around. (This shot was specially set up and you are unlikely to meet so many different types of enemy at once.) Views to the front, rear and both side of the ship can be called up.

Instruments at the bottom of the screen give compass, a three-dimensional map of space and other ships within range, and the status of energy banks and weaponry.

Controlling the ship takes some getting used to, as it's difficult to know where you are and which way to go, especially when someone's shooting at you. The keys are a bit awkward: there are a lot of them, and some are in strange places.

Elite apparently uses up just about every spare byte there is in the Beeb's memory (and some it shouldn't). The graphics impressed even the Cambridge gurus when *Elite*'s two student authors showed them off. Circles and elipses are drawn in full in real time with hidden line removal. The 3D effects are astounding, and the suns have to be seen to be believed. Screen graphics modes 4 and 5 are used at the same time to give accurate plotting and colour for the display. Screen width is reduced to speed up plotting and save memory. The reason for the strange keys? Simply because they are next to each other in the operating system's look-up table.

How much work the BBC is doing when plotting the suns and planets is shown as you fly towards them. If you look straight ahead, the game is slowed down! To get there quicker look to the side or behind.

So how do we sum this one up? Well, it's the best game of its type and all *Meteors/Starship Command/Defender/Aviator* freaks will love it. Players who like adventuring might well be hooked by the trading aspects. And then on the disc version there are these things called 'missions' where a task is set. Finally, there's the unknown: no-one has yet reached the ultimate Elite status, and there's even a ship out there that no-one has yet come across. Apparently it eats spaceships, so watch out.

'The 3D effects are astounding'